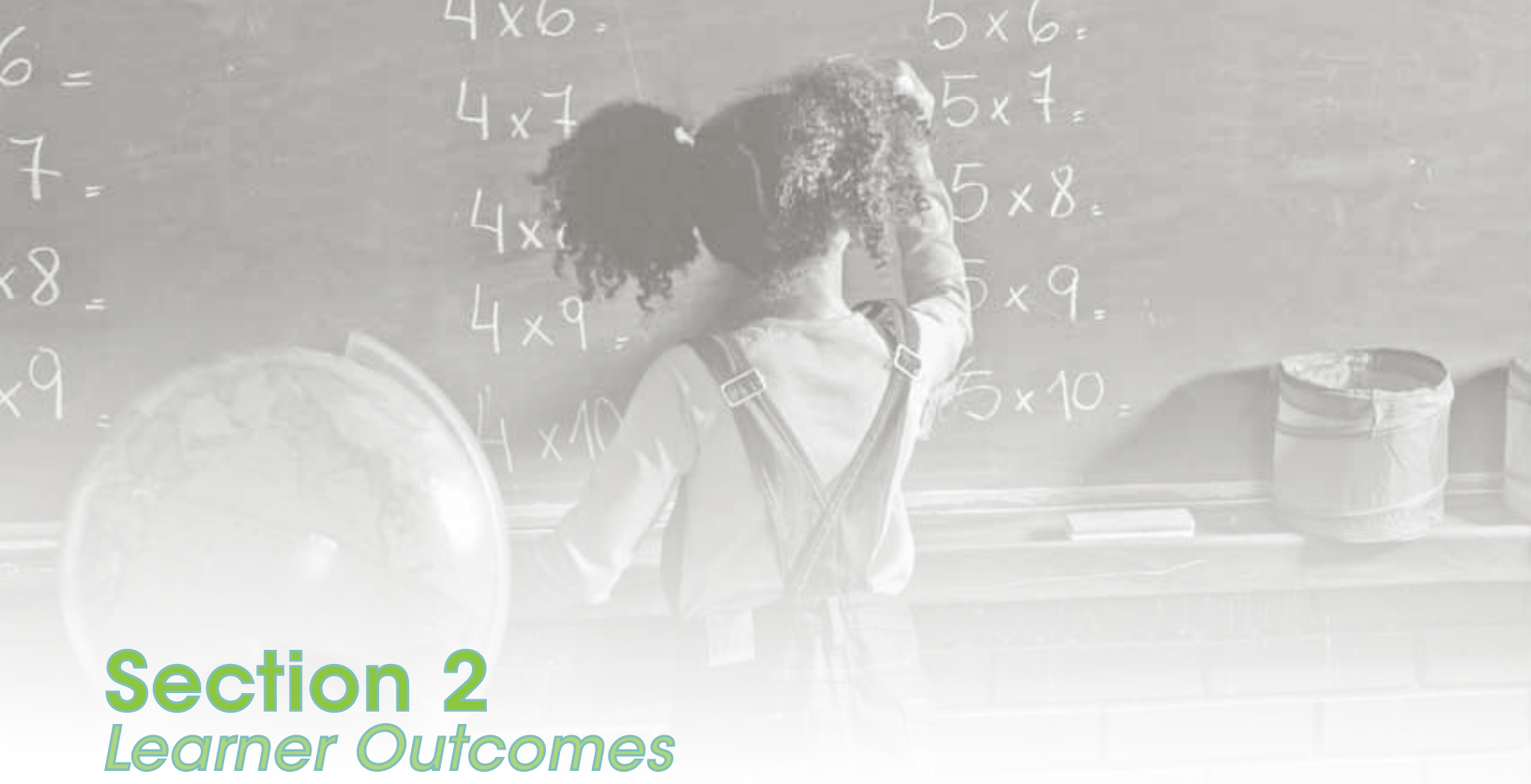


Section 2

Learner Outcomes





Section 2

Learner Outcomes

Contents

Introduction.....	41
Academic Outcomes	
Indicator 10. Reading Performance	42
Indicator 11. Reading Achievement Gaps	44
Indicator 12. Mathematics Performance	46
Indicator 13. Mathematics Achievement Gaps	48
Indicator 14. Science Performance	50
Indicator 15. International Reading Literacy.....	52
Indicator 16. International Mathematics and Science Literacy	54
Economic Outcomes	
Indicator 17. Annual Earnings of Young Adults	56
Indicator 18. Employment Outcomes of Young Adults	58

Introduction

The indicators in this section of *The Condition of Education* examine student achievement and other outcomes of education among students in elementary and secondary education and among adults in the broader society. The indicators on student achievement illustrate how students are performing on assessments in reading, mathematics, science, and other academic subject areas. They highlight trends over time in student achievement as well as gaps in achievement between groups. Indicators prepared for this year's volume appear on the following pages, and all indicators in this section, including indicators from previous years, appear on the NCES website (see the "List of Indicators on *The Condition of Education* Website" on page xxii for a full listing of indicators).

Children enter school with varying levels of knowledge and skill. Measures of these early childhood competencies represent important indicators of students' future prospects both inside and outside of the classroom. The first indicator in this section (found on the website) traces the gains in achievement and the specific reading and mathematics skills of children through the early years of elementary education. This indicator highlights changes in student achievement for a cohort of kindergarten children as they progressed through the early years of schooling.

As students progress through school, it is important to know the extent to which they are acquiring necessary skills and gaining proficiency in challenging subject matter. Several indicators in this section report trends in assessment performance, either by age or by grade,

among elementary and secondary students. Performance is measured in three ways: (1) as the change in students' average scores over time, (2) as the change in the percentage of students achieving specified levels of achievement, and (3) through international comparisons of national average scores. Indicators in this volume show the reading, mathematics, and science achievement of students in grades 4, 8, and 12. In addition, there are indicators that examine the gaps in achievement by various groups of students. Other indicators that appear on the website highlight achievement in the arts, writing, economics, U.S. history, and geography. Also, two indicators found in this volume examine the reading, mathematics, and science performance of students at the international level.

In addition to academic achievement at the elementary and secondary levels, adult literacy contributes to an educated, capable, and engaged citizenry. Indicators on the website highlight adult literacy, measured here by levels of adult literacy and adult reading habits.

Economic outcomes include the earnings of individuals with varying levels of educational attainment, as well as the likelihood of being employed (both included in this volume). The last indicators in this section look specifically at the economic outcomes of education. An indicator showing the health status of individuals by their educational attainment is featured on the website.

Indicators of learner outcomes from previous editions of *The Condition of Education* not included in this volume are available at <http://nces.ed.gov/programs/coe>.

Reading Performance

Between 2007 and 2009, there was no measurable change in the average grade 4 reading score; the average grade 8 reading score, however, increased 1 point. At grade 12, the average reading score increased by 2 points between 2005 and 2009.

In 2009, the average National Assessment for Educational Progress (NAEP) reading scale score for 4th-grade students (221) was not measurably different from the 2007 score (221), but higher than the scores on all earlier assessments between 1992 (217) and 2005 (219) (see table A-10-1). From 1992 to 2009, 4th-grade students' average NAEP reading scale scores increased 4 points. For 8th-grade students, the average score in 2009 was 1 point higher than in 2007 (263) and 4 points higher than in 1992 and 1994, but not always measurably different from the scores on the assessments given between 1998 and 2005. The average reading score for 12th-grade students was 2 points higher in 2009 than in 2005 (286), the year of the immediately preceding assessment, but was 4 points lower than the score in 1992 (292). The 2009 score was not measurably different than the scores in 1994 or 2002.

Percentages of 4th-grade students performing at or above the *Basic*, at or above the *Proficient*, and at the *Advanced* achievement levels in reading showed no measurable change from 2007 to 2009. In 2009, about 67 percent of 4th-grade students performed at or above *Basic*, 33 percent performed at or above *Proficient*, and 8 percent performed at *Advanced*. Percentages of 8th-grade students performing at or above *Basic* and at or above *Proficient* each increased 1 percentage point between 2007 and 2009. Additionally, the 2009 percentages of 8th-grade students who reached both these performance levels were higher than in 1992. In 2009, the percentage of 8th-grade students performing at the *Advanced* level (3 percent) was not measurably different from the percentage performing at this level in 2007 (3) or 1992 (3). The percentage of students at grade 12 performing at or above *Basic* (74 percent) in 2009 was not significantly different from the percentage doing so in 2005 (73), but was lower than the percentage doing so in 1992 (80). Thirty-eight percent of 12th-grade students performed at or above *Proficient* in 2009; this was 3 percentage points higher than the 2005 percentage, but not significantly different than percentages in the earlier assessment years. There was no measurable change at the *Advanced* level from 2005 at

grade 12, although it was 1 percentage point higher than in 1992.

At grade 4, the average reading scores in 2009 for White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students were not measurably different from their scores in 2007 (see table A-10-2). The 2009 reading scores for White, Black, and Hispanic students were, however, higher than the scores from assessment years prior to 2007. At grade 8, average reading scores were higher in 2009 than in 2007 for all racial/ethnic groups. At grade 12, the average score for White students was 3 points higher in 2009 than in 2005, and the score for Asian/Pacific Islander students was 11 points higher. Scores for Black, Hispanic, and American Indian/Alaska Native students did not change significantly from 2005 to 2009.

NAEP results also permit state-level comparisons of the reading abilities of 4th- and 8th-grade students in public schools. State measures of the reading abilities of 12th-grade students are available from a 2009 state pilot reading assessment in which 11 states participated. While there was no measurable change from 2007 to 2009 in the overall average score for 4th-grade public school students in the nation, scores increased in two states (Kentucky and Rhode Island) and the District of Columbia and decreased in four states (Alaska, Iowa, New Mexico, and Wyoming) (see table A-10-3). At grade 8, although the average score for public school students in the nation was 1 point higher in 2009 than in 2007, score increases were seen in less than one-quarter of the states. Scores were higher in 2009 than in 2007 for nine states (Alabama, Connecticut, Florida, Hawaii, Kentucky, Missouri, New Mexico, Pennsylvania, and Utah), and in the remaining states and the District of Columbia, scores showed no measurable change.

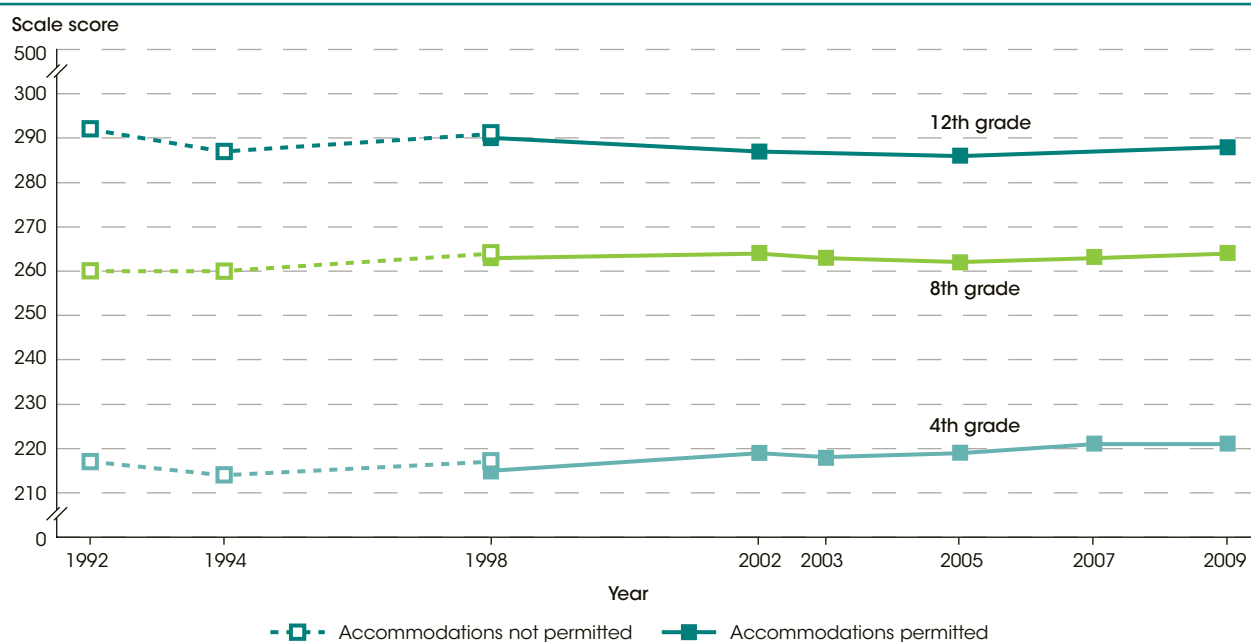


For more information: Tables A-10-1 through A-10-3
Glossary: Achievement levels, English language learners, Traditional public school

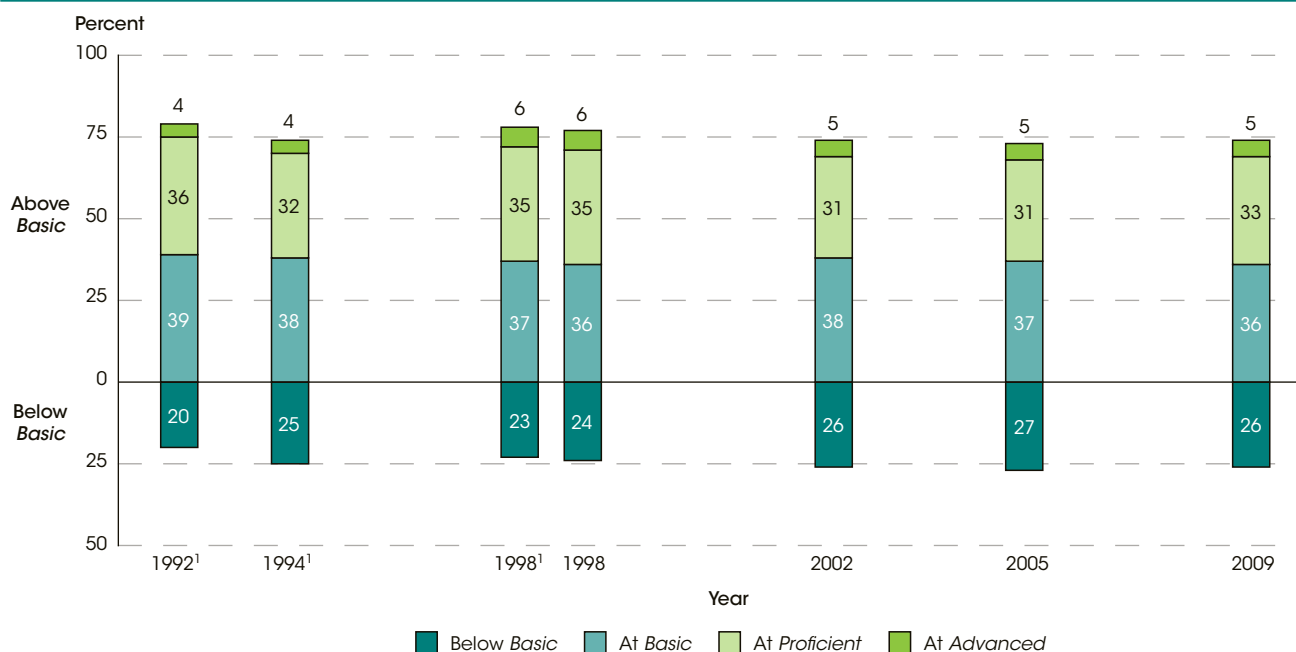
Technical Notes

NAEP reading scores range from 0 to 500. The 12th-grade NAEP reading assessment was not administered in 2003 or 2007. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance. Testing accommodations (e.g., extended

time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. For more information on NAEP, see *supplemental note 4*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*.

Figure 10-1. Average reading scale scores of 4th-, 8th-, and 12th-grade students: Selected years, 1992-2009

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Student assessments are not designed to permit comparisons across subjects or grades. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. The 12th-grade NAEP reading assessment was not administered in 2003 or 2007. For more information on NAEP see *supplemental note 4*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2009 Reading Assessments, NAEP Data Explorer.

Figure 10-2. Percentage distribution of 12th-grade students across NAEP reading achievement levels: Selected years, 1992-2009

¹ Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. The footnoted column represents the sample without accommodations.

NOTE: Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance. Detail may not sum to totals because of rounding. For more information on the National Assessment of Educational Progress (NAEP), see *supplemental note 4*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2009 Reading Assessments, NAEP Data Explorer.

Reading Achievement Gaps

In 2009, White students at grade 12 scored 27 points higher in reading than Black students and 22 points higher than Hispanic students. Neither score gap was significantly different from the respective score gaps in previous assessment years.

In 2009 and in all previous assessment years since 1992, the average National Assessment for Educational Progress (NAEP) reading scale scores of White 4th-, 8th-, and 12th-grade students were higher than their Black and Hispanic peers' scores. This disparity is known as an achievement gap—in NAEP reading scores, the achievement gap is seen by the differences between the average scores of two student subgroups on the standardized assessment. In 2009, the average reading score of Black 4th-grade students was less than that of White 4th-grade students by 26 points; this gap was not measurably different from the gap in 2007, but it was smaller than the gaps in all other assessment years prior to 2007 (see table A-11-1). The reading achievement gap between Hispanic and White 4th-grade students in 2009 (-25 points) was not measurably different from the gaps in 2007 or 1992.

Scores of White, Black, and Hispanic 8th-grade students have all increased from 1992, yet neither the 2009 reading achievement gap between Black and White 8th-grade students (-26 points) nor the gap between Hispanic and White 8th-grade students (-24 points) was measurably different from the corresponding gaps in 2007 and 1992. In 2009, White students at grade 12 scored 27 points higher in reading than Black students and 22 points higher than Hispanic students. Neither score gap was measurably different from the respective score gaps in previous assessment years.

In 2009, female 4th-grade students scored 7 points higher, on average, than male students. This difference was not measurably different from the gaps in 2007 or 1992. Scores for female 8th-grade students in 2009 were not measurably different than their scores in 2007 or 1992,

while male 8th-grade students' average reading score in 2009 was higher than their scores in either of the other two years. The reading score difference between male and female 8th-grade students in 2009 (-9 points) was not measurably different from the difference seen in 2007, but it was smaller than the difference seen in 1992 (-13 points). Average reading scores for both male and female 12th-grade students were lower in 2009 than in 1992. Female students scored 12 points higher on average than male students in 2009, not measurably different from the differences in 2005 or 1992.

In 2009, achievement gaps between students in schools with high percentages of low-income students and students in schools with low percentages of such students existed at all three grade levels (see table A-11-2). For this indicator, students are identified as attending schools with high percentages of low-income students if more than 75 percent of the students in the school are eligible for free or reduced-price lunch. Students are identified as attending schools with low percentages of low-income students if 25 percent or fewer of the students in the school are eligible for free or reduced-price lunch. In 2009, the low-income gap for grade 4 was not measurably different from the gap in 2007 but was smaller than gaps in all years prior to 2007. In grade 8, there were no measurable differences in the 2009 low-income gap and gaps in previous assessment years. In 2009, the low-income gap at grade 12 was larger than gaps reported in all previous assessments.



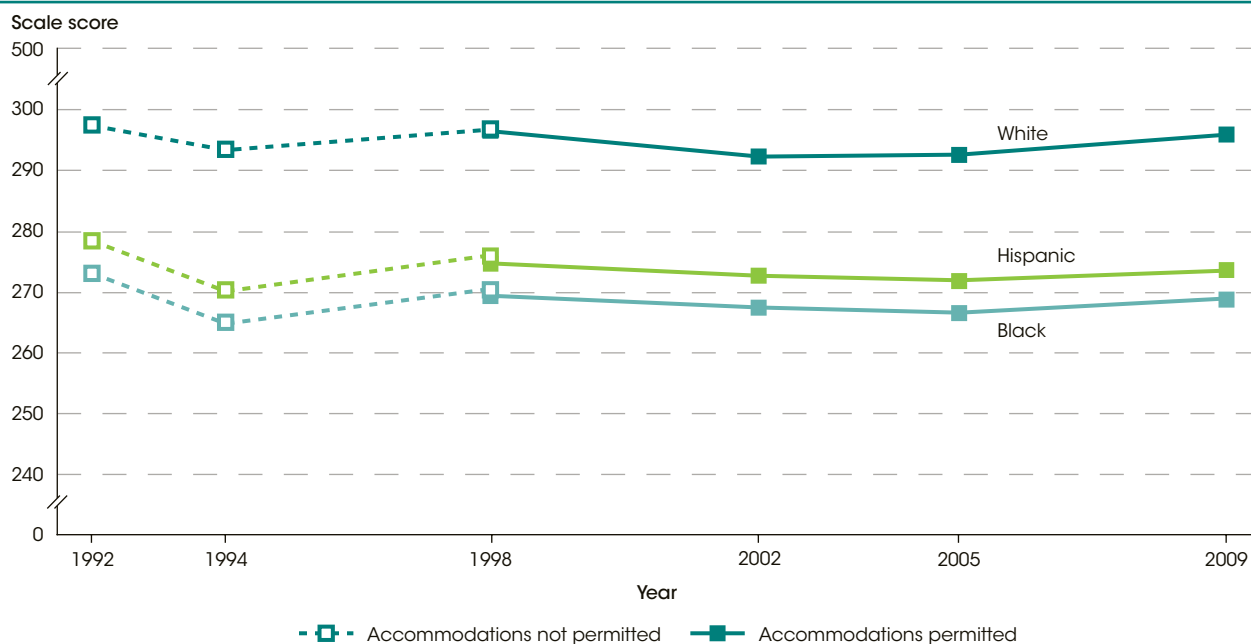
For more information: *Tables A-11-1 and A-11-2*

Glossary: *Achievement levels, English language learner*

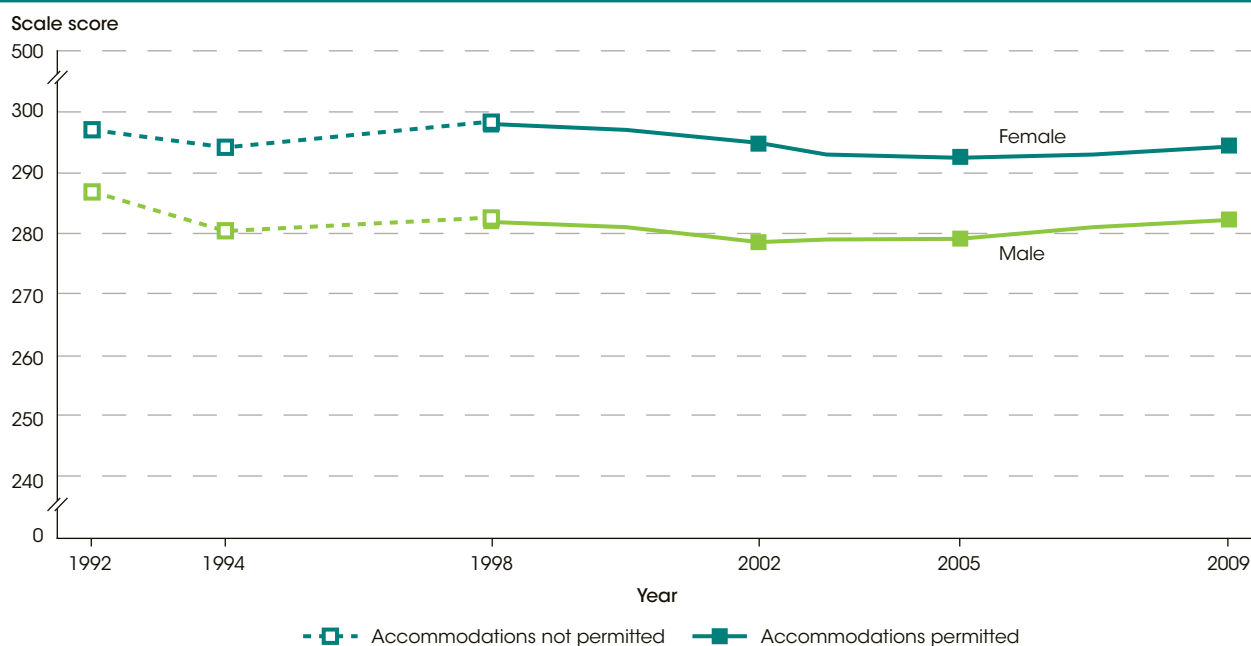
Technical Notes

NAEP reading scores range from 0 to 500. Score gaps are calculated based on differences between unrounded scores. Testing accommodations for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested

with and without accommodations in 1998 and 2000. The 12th-grade NAEP reading assessment was not administered in 2000, 2003, or 2007. For more information on race/ethnicity, see *supplemental note 1*. For more information on NAEP, see *supplemental note 4*.

Figure 11-1. Average reading scale scores of 12th-grade students, by race/ethnicity: Selected years, 1992–2009

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. For more information on NAEP, see *supplemental note 4*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2009 Reading Assessments, NAEP Data Explorer.

Figure 11-2. Average reading scale scores of 12th-grade students, by sex: Selected years 1992–2009

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992 and 1994; students were tested with and without accommodations in 1998. For more information on NAEP, see *supplemental note 4*.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2009 Reading Assessments, NAEP Data Explorer.

Mathematics Performance

From 1990 to 2009, average grade 4 mathematics scores increased by 27 points and average grade 8 scores increased by 20 points. At grade 12, average scores increased by 3 points between 2005 and 2009.

In 2009, the average National Assessment of Educational Progress (NAEP) mathematics scale score for 4th-grade students (240) was not measurably different from the 2007 score but was higher than the scores on all of the assessments given between 1990 and 2005 (see table A-12-1). From 1990 to 2009, average grade 4 NAEP mathematics scale score increased by 27 points. The average score for 8th-grade students in 2009 was higher than the average scores in all previous assessment years. From 1990 to 2009, average grade 8 scores increased by 20 points, from 263 to 283. The average 12th-grade mathematics score was 3 points higher in 2009 than it was in 2005, the year the assessment was first given.

The percentages of 4th-grade students performing at or above the *Basic*, at or above the *Proficient*, and at the *Advanced* achievement levels showed no measurable change from 2007 to 2009. In 2009, some 82 percent of 4th-grade students performed at or above *Basic*, 39 percent performed at or above *Proficient*, and 6 percent performed at *Advanced*. The percentages of 8th-grade students performing at or above *Basic*, at or above *Proficient*, and at the *Advanced* achievement levels each showed increases of 1 to 2 percentage points from 2007 to 2009. In 2009, some 73 percent of 8th-grade students performed at or above *Basic*, 34 percent performed at or above *Proficient*, and 8 percent performed at *Advanced*. The percentage of 12th-grade students performing at or above *Basic* was 3 percentage points higher in 2009 (64 percent) than in 2005. Twenty-six percent of 12th-grade students performed at or above the *Proficient* level in 2009, which was also a 3-point increase from the percentage who did so in 2005. The percentages performing at the *Advanced* level in 2005 and 2009 were not measurably different (2 and 3 percent, respectively).

At grade 4, the average mathematics scores in 2009 for White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students were not measurably different from their scores in 2007 (see table

A-12-2). The 2009 scores for White, Black, Hispanic, and Asian/Pacific Islander 4th-grade students were, however, higher than their scores from the assessment years prior to 2007. At grade 8, the average mathematics scores in 2009 for White, Black, Hispanic, and Asian/Pacific Islander students were higher than their scores in 2007. The 2009 score for American Indian/Alaska Native 8th-grade students was not measurably different from their scores in any of the earlier assessment years. At grade 12, average mathematics scores were higher in 2009 than in 2005 for all racial/ethnic groups. From 2005 to 2009, the average score for Asian/Pacific Islander 12th-grade students increased by 13 points, and the average score for American Indian/Alaska Native students increased by 10 points.

NAEP results also permit state-level comparisons of the mathematics achievement of 4th- and 8th-grade students in public schools. While there was no measurable change from 2007 to 2009 in the overall average mathematics score for 4th-grade public school students, scores increased in seven states (Colorado, Kentucky, Maryland, Nevada, New Hampshire, Rhode Island, and Vermont) and the District of Columbia and decreased in four states (Delaware, Indiana, West Virginia, and Wyoming) (see table A-12-3). At grade 8, scores were higher in 2009 than in 2007 in 14 states (Connecticut, Georgia, Hawaii, Idaho, Missouri, Montana, Nevada, New Hampshire, New Jersey, Rhode Island, South Dakota, Utah, Vermont, and Washington) and the District of Columbia. At grade 8, no state had mathematics scores decline from 2007 to 2009. State mathematics results for 12th-grade students are available only for 2009, the pilot year of a NAEP state mathematics assessment in which 11 states participated.

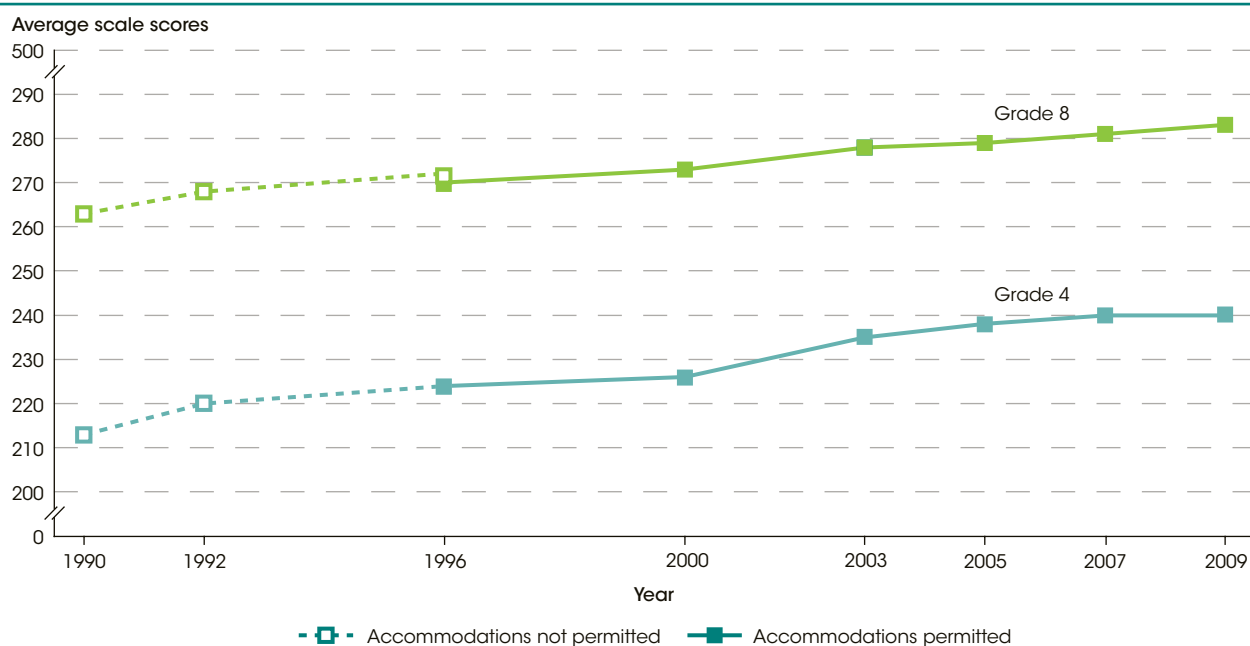


For more information: Tables A-12-1 through A-12-3
Glossary: Achievement levels, English language learner, Traditional public school

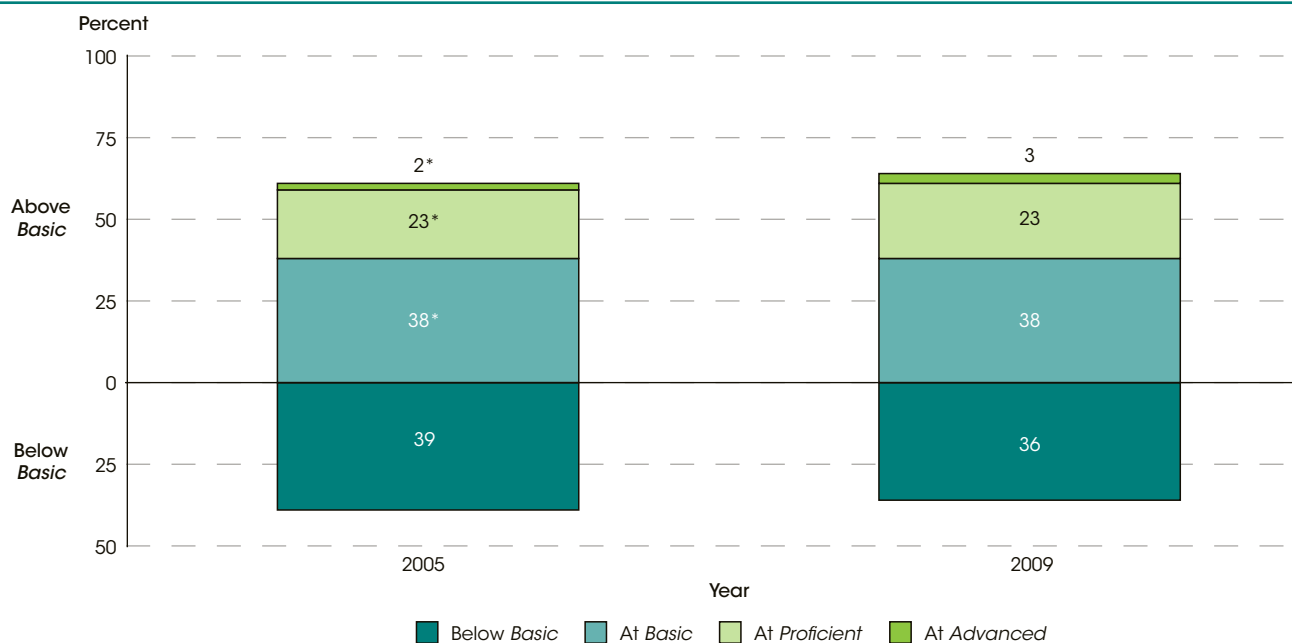
Technical Notes

NAEP mathematics scores range from 0 to 500 for grades 4 and 8. The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates

superior performance. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990 and 1992. Students in grades 4 and 8 were tested with and without accommodations in 1996. For more information on NAEP, see *supplemental note 4*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*.

Figure 12-1. Average mathematics scale scores of 4th- and 8th-grade students: Selected years, 1990–2009

NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English proficient students were not permitted in 1990 and 1992; students were tested with and without accommodations in 1996. For more information on NAEP, see *supplemental note 4*. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990–2009 Mathematics Assessments, NAEP Data Explorer.

Figure 12-2. Percentage distribution of 12th-grade students across NAEP mathematics achievement levels: 2005 and 2009

* Percentage is significantly different ($p < .05$) from 2009.

NOTE: Achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance. Detail may not sum to totals because of rounding. For more information on the National Assessment of Educational Progress (NAEP), see *supplemental note 4*. The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 2005 and 2009 Mathematics Assessments, NAEP Data Explorer.

Mathematics Achievement Gaps

In 2009, White students at grade 12 scored 30 points higher in mathematics than Black students and 23 points higher than Hispanic students. Neither score gap was measurably different from the corresponding score gaps in 2005.

In 2009 and in all previous assessment years since 1992, the average National Assessment for Educational Progress (NAEP) mathematics scale scores of White 4th-, 8th-, and 12th-grade students were higher than the scores of their Black and Hispanic peers. This disparity is known as an achievement gap—in the NAEP mathematics assessment, it is the difference between the average scores of two student subgroups on the standardized assessment. The achievement gap between Black and White 4th-grade students in 2009 (-26 points) was not measurably different from the gap in 2007, but it was smaller than the gap in 1990 (-32 points). The 21-point achievement gap between White and Hispanic 4th-grade students in 2009 was not measurably different from the gap in 2007 or the gap in 1990 (see table A-13-1).

White, Black, and Hispanic 8th-grade students' scores increased between 2007 and 2009, yet neither the 2009 achievement gap between Black and White 8th-grade students (-32 points) nor the 2009 achievement gap between Hispanic and White 8th-grade students (-26 points) was measurably different from the corresponding gaps in 2007 or 1990. In 2009, White 12th-grade students scored 30 points higher in mathematics than Black students and 23 points higher than Hispanic students. Neither achievement gap was measurably different from the corresponding gaps in 2005.

In 2009, male 4th-grade students scored 2 points higher on average than female 4th-grade students. This difference was not measurably different from the gap in 2007. At grade 8, male students scored 2 points higher than female

students in 2009; since the increases in scale scores were comparable for both males and females since 2007, the 2-point score difference was not measurably different from the difference in 2007. Average mathematics scores for both male and female 12th-grade students were higher in 2009 than in 2005. Male students scored 3 points higher on average than female students in 2009, not measurably different from the score difference in 2005.

In 2009, achievement gaps between students in schools with high percentages of low-income students and students in schools with low percentages of such students exist at all three grade levels (see table A-13-2). For this indicator, students are identified as attending schools with high percentages of low-income students if more than 75 percent of the students in the school are eligible for free or reduced-price lunch. Students are identified as attending schools with low percentages of low-income students if 25 percent or fewer of the students in the school are eligible for free or reduced-price lunch. In 2009, the low-income gap at grade 4 was -31 points, at grade 8 the gap was -38 points, and at grade 12 the gap was -36 points (see table A-13-2). None of the low-income gaps in 2009 were measurably different from previous gaps reported by NAEP.



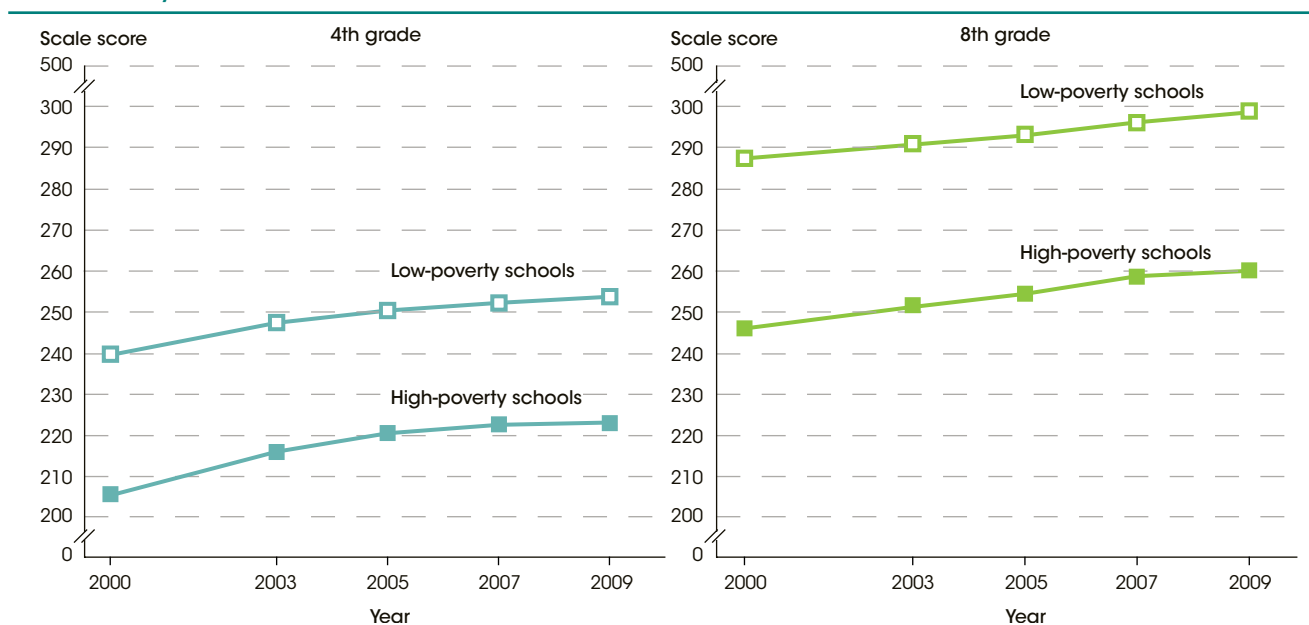
For more information: *Tables A-13-1 and A-13-2*
Glossary: *Achievement levels, English language learner*

Technical Notes

NAEP mathematics scores range from 0 to 500 for grades 4 and 8. The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300. Score gaps are calculated based on differences between

unrounded scores. Testing accommodations for children with disabilities and English language learners were not permitted in 1990 and 1992. Students were tested in grades 4 and 8 with and without accommodations in 1996. For more information on race/ethnicity or free or reduced-price lunch, see *supplemental note 1*. For more information on NAEP, see *supplemental note 4*.

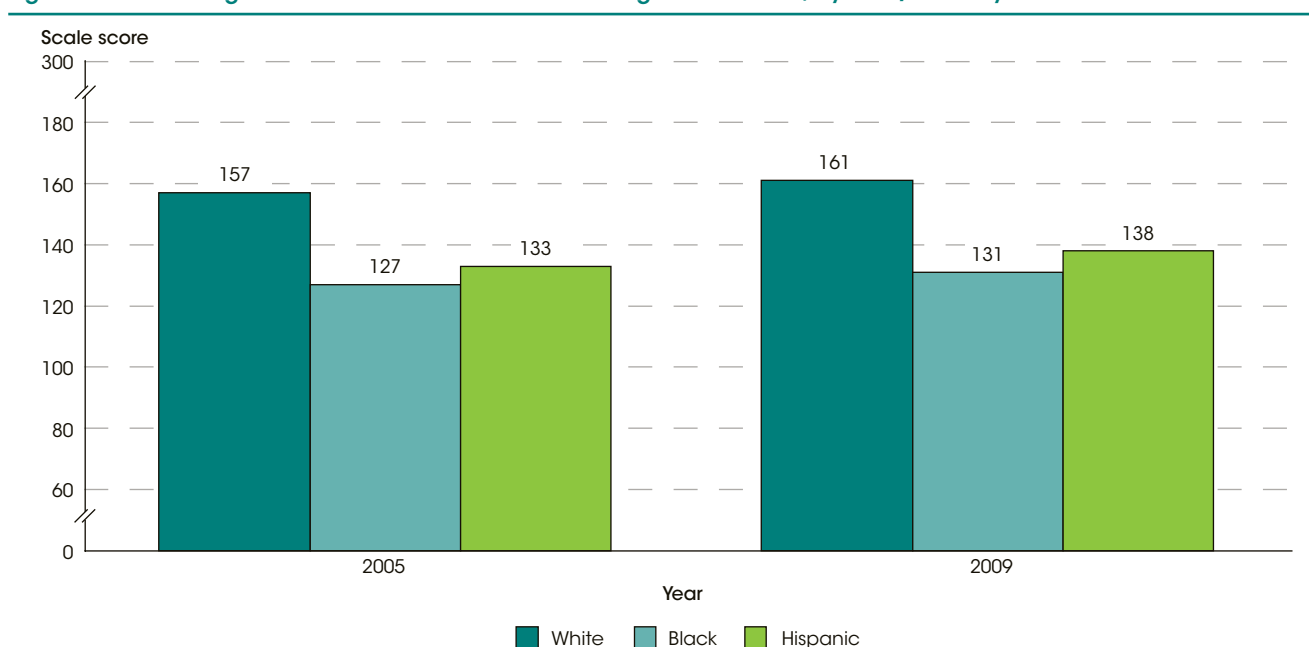
Figure 13-1. Average mathematics scale scores of 4th- and 8th-grade students, by school poverty level: Selected years, 2000–09



NOTE: The National Assessment of Educational Progress (NAEP) mathematics scores range from 0 to 500 for grades 4 and 8. The percentage of students eligible for free or reduced-price lunch ranges between 0–25 percent in low-poverty schools and between 76–100 percent in high-poverty schools. For more information on NAEP, see *supplemental note 4* and for more information on free or reduced-price lunch, see *supplemental note 1*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 2000–2009 Mathematics Assessments, NAEP Data Explorer.

Figure 13-2. Average mathematics scale scores of 12th-grade students, by race/ethnicity: 2005 and 2009



NOTE: The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300. For more information on the National Assessment of Educational Progress (NAEP), see *supplemental note 4*. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 2005 and 2009 Mathematics Assessments, NAEP Data Explorer.

Science Performance

Thirty-four percent of students at grade 4, some 30 percent of students at grade 8, and 21 percent of students at grade 12 performed at or above the Proficient level in the 2009 science assessment. One percent of 4th-grade students, 2 percent of 8th-grade students, and 1 percent of 12th-grade students performed at the Advanced level.

The National Assessment of Educational Progress (NAEP) 2009 science assessment was designed to measure students' knowledge of three content areas: physical science, life science, and Earth and space sciences. In 2009, a new science framework was developed by the National Assessment Governing Board to keep assessment content current with key developments in science, curriculum standards, assessments, and research. As such, the results of the 2009 science assessment are not comparable to results from earlier years. Nevertheless, this indicator presents a snapshot of what the nation's 4th-, 8th-, and 12th-grade students know and can do in science, and it will serve as the basis for comparisons on future science assessments.

Seventy-two percent of 4th-grade students, 63 percent of 8th-grade students, and 60 percent of 12th-grade students performed at or above the *Basic* achievement level in science in 2009 (see table A-14-1). Thirty-four percent of students at grade 4, some 30 percent of students at grade 8, and 21 percent of students at grade 12 performed at or above the *Proficient* level in 2009. Some 1 percent of 4th-grade students, 2 percent of 8th-grade students, and 1 percent of 12th-grade students performed at the *Advanced* level.

On average, male students scored higher than female students at all three grades in 2009 (see table A-14-2). Differences were also reflected in achievement-level results: at grade 4, 35 percent of male students performed at or above *Proficient*, compared with 32 percent of female students. At grades 8 and 12, the percentages of male students performing at or above the *Basic*, at or above the *Proficient*, and at the *Advanced* levels were higher than the percentages of female students.

Results of the 2009 science assessment varied for students of different racial/ethnic groups. At grades 4 and 8, White students had higher average scale scores (163 and 162, respectively) than other racial/ethnic groups. In addition, Asian/Pacific Islander students scored higher (160 at grades 4 and 8) than Black, Hispanic, and American Indian/Alaska Native students. At grade 12, there was no significant difference in scores for White and Asian/Pacific Islander students (159 vs. 164, respectively), and both groups scored higher than other racial/ethnic groups.

At grades 4 and 8, the percentage of students who scored at or above *Basic* and at or above *Proficient* were lowest for students in high-poverty schools, meaning those schools in which more than 75 percent of the students qualify for free or reduced-price lunch. At grade 4, some 46 percent of students in high-poverty schools scored at or above *Basic* and 11 percent scored at or above *Proficient*, compared with 89 and 54 percent, respectively, for students in low-poverty schools, meaning those schools in which 25 percent or fewer of the students qualify for free or reduced-price lunch. At grade 8, some 33 percent of students in high-poverty schools scored at or above *Basic* and 8 percent scored at or above *Proficient*, compared with 81 percent and 46 percent in low-poverty schools.



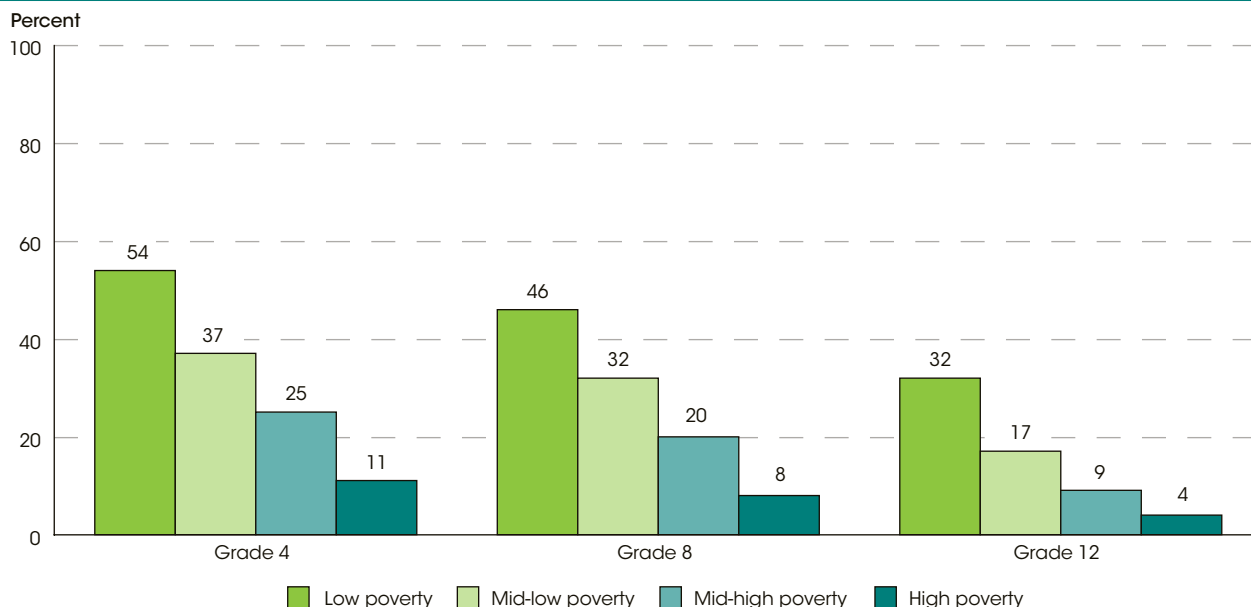
For more information: Tables A-14-1 through A-14-3
Glossary: Achievement levels, English language learner

Technical Notes

NAEP science scores range from 0 to 300. The achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, *Proficient* indicates demonstrated competency over challenging subject matter, and *Advanced* indicates superior performance. In 2009, a new framework was developed for the 4th-, 8th-,

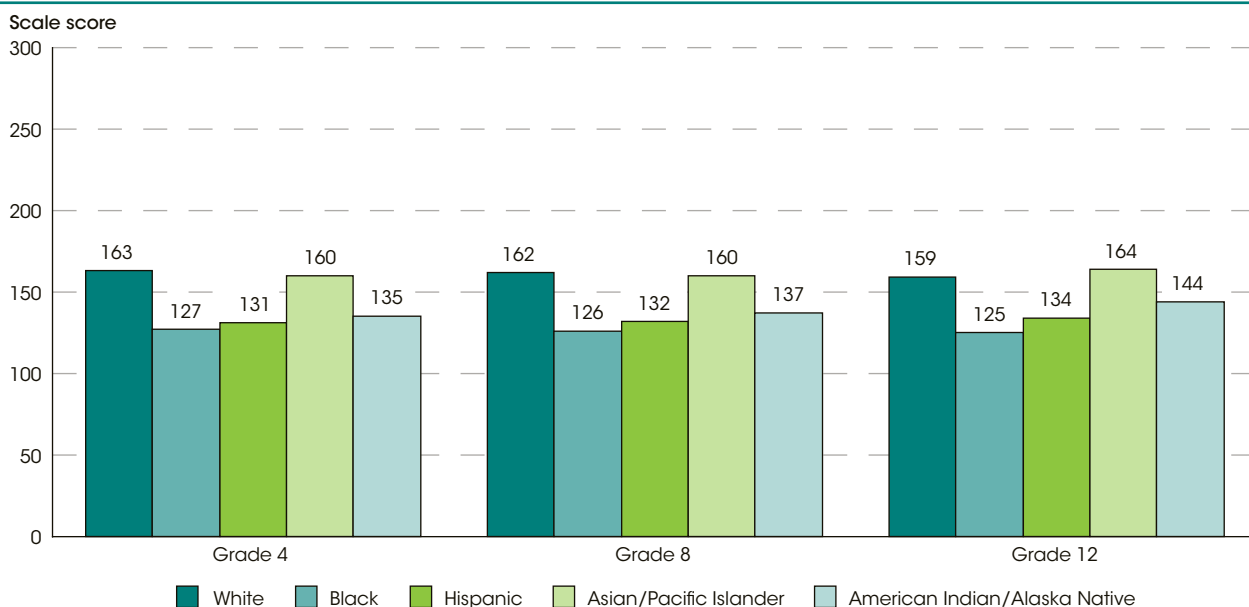
and 12th-grade NAEP science assessment. For more information on NAEP, see *supplemental note 4*. Eligibility or approval for the National School Lunch Program also serves as a measure of poverty status. Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity or free or reduced-price lunch, see *supplemental note 1*.

Figure 14-1. Percentage of students who performed at or above the *Proficient* achievement level in science, by grade and school poverty level: 2009



NOTE: The National Assessment of Educational Progress (NAEP) science achievement levels define what students should know and be able to do. Proficient indicates demonstrated competency over challenging subject matter, and Advanced indicates superior performance. The percentage of students at or above Proficient includes students at the *Proficient* and the *Advanced* achievement levels. *High-poverty schools* are defined as public schools where more than 75 percent of the students are eligible for the free or reduced-price lunch (FRPL) program, and *mid-high poverty schools* are those schools where 51 to 75 percent of the students are eligible for FRPL, and *mid-low poverty schools* are those schools where 26 to 50 percent of the students are eligible for FRPL, and *low-poverty schools* are defined as public schools where 25 percent or fewer students are eligible for FRPL, and *low-poverty schools* are those schools where 25 percent or fewer students are eligible for FRPL. For more information on free or reduced-price lunch, see *supplemental note 1*. For more information on NAEP, see *supplemental note 4*. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment, NAEP Data Explorer.

Figure 14-2. Average science scale scores, by grade and race/ethnicity: 2009



NOTE: Race categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*. The National Assessment of Educational Progress (NAEP) science scale ranges from 0 to 300. For more information on NAEP, see *supplemental note 4*. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment, NAEP Data Explorer.

International Reading Literacy

In 2009, the average U.S. combined reading literacy score for 15-year-old students was not measurably different from the average score of the 34 OECD-member countries. The U.S. average score was lower than that of 6 OECD countries and higher than that of 13 OECD countries.

The 2009 Program for International Student Assessment (PISA) reports the performance of 15-year-old students in reading literacy in 65 countries and other education systems, including the 34 Organization for Economic Co-operation and Development (OECD) countries, 26 non-OECD countries, and 5 other education systems. The OECD countries are a group of the world's most advanced economies. Other education systems refer to non-national entities, such as Shanghai-China.

The U.S. students' average score on the combined reading literacy scale (500) was not measurably different from the average score of OECD countries (493) (see table A-15-1). Compared with the other 64 countries and other education systems, the U.S. average was lower than the average in 9 countries and other education systems (6 OECD countries, 1 non-OECD country, and 2 education systems) and higher than the average in 39 countries and other education systems (13 OECD countries, 24 non-OECD countries, and 2 other education systems).

PISA 2009 presents results for three reading literacy subscales that represent reading processes: *access and retrieve*, *integrate and interpret*, and *reflect and evaluate*. These subscales refer to skills students must apply to draw meaning from reading, (e.g., reflect and evaluate requires students to relate what they read to their own knowledge and experience and judge what they read objectively). On the *access and retrieve* subscale and *integrate and interpret* subscale, U.S. students' averages (492 and 495, respectively) were not measurably different from the OECD averages (495 and 493, respectively). On the *reflect and evaluate* subscale, the U.S. students' average (512) was higher than the OECD average (494).

In all 65 participating countries and other education systems, female students scored higher, on average, than male students on the combined reading literacy scale (see table A-15-2). The average difference between U.S. males and females (25 scale score points) was smaller than the average difference of the 34 OECD countries (39 scale score points) and the difference in 45 countries and other education systems (24 OECD countries, 18 non-OECD countries, and 3 other education systems).

The average scores of U.S. Black and Hispanic students on the combined reading literacy scale (441 and 466, respectively) were lower than the U.S. and OECD averages. In contrast, average scores of U.S. White and Asian students (525 and 541, respectively) were higher than the U.S. and OECD averages (see table A-15-3). The average score of U.S. students who reported being of two or more races (502) was not measurably different from the U.S. and OECD averages.

The U.S. average in reading literacy in 2000 (504), the last PISA cycle in which reading literacy was assessed in depth, was not measurably different from the average in 2009 (500) (see table A-15-4). There were no measurable differences between the U.S. average and the OECD trend average in 2000 (504 and 496, respectively) or in 2009 (500 and 495, respectively).



For more information: Tables A-15-1 through A-15-4
Glossary: Organization of Economic Co-operation and Development (OECD)

Technical Notes

PISA is principally an OECD study, and the results for non-OECD countries and other education systems are displayed separately and are not included in the OECD average. The OECD average is the average of the national averages of the OECD member countries, with each country weighted equally, and differs from the OECD average used for analysis of trends in student scores over time. The OECD average used in the analysis of trends in reading literacy is based on the averages of the 27 OECD countries with comparable data for 2000 and 2009. The

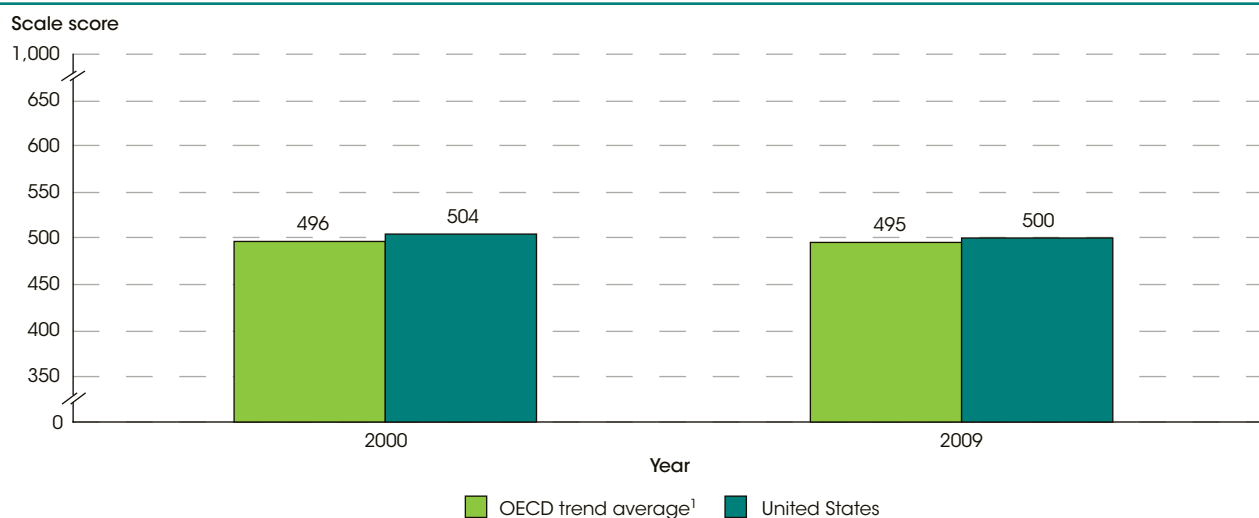
reading literacy scale was established in PISA 2000 to have a mean of 500 and a standard deviation of 100. The combined reading literacy scale is made up of all the items in the three subscales, and each scale is computed separately through Item Response Theory (IRT) models. Therefore, the combined reading scale score is not the average of the three subscale scores. For more information on PISA, see *supplemental note 5*. For more information on race/ethnicity, please see *supplemental note 1*.

Figure 15-1. Average scores of 15-year-old students on combined reading literacy scale, by country: 2009

OECD country and average score					
Korea, Republic of	539	Canada	524	Japan	520
Finland	536	New Zealand	521	Australia	515
Netherlands	508	Iceland	500	France	496
Belgium	506	United States	500	Denmark	495
Norway	503	Sweden	497	United Kingdom	494
Estonia	501	Germany	497	Hungary	494
Switzerland	501	Ireland	496	OECD average	493
Poland	500				
Portugal	489	Czech Republic	478	Austria	470
Italy	486	Slovak Republic	477	Turkey	464
Slovenia	483	Israel	474	Chile	449
Greece	483	Luxembourg	472	Mexico	425
Spain	481				
Non-OECD country or other education system and average score					
Shanghai-China	556	Hong Kong-China	533	Singapore	526
Liechtenstein	499	Chinese Taipei	495		
Macao-China	487	Romania	424	Argentina	398
Latvia	484	Thailand	421	Kazakhstan	390
Croatia	476	Trinidad and Tobago	416	Albania	385
Lithuania	468	Colombia	413	Qatar	372
Dubai-UAE	459	Brazil	412	Panama	371
Russian Federation	459	Montenegro, Republic of	408	Peru	370
Serbia, Republic of	442	Jordan	405	Azerbaijan	362
Bulgaria	429	Tunisia	404	Kyrgyz Republic	314
Uruguay	426	Indonesia	402		

Average is higher than the U.S. average
 Average is not measurably different from the U.S. average
 Average is lower than the U.S. average

NOTE: The Organization for Economic Co-operation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Because the Program for International Student Assessment (PISA) is principally an OECD study, the results for non-OECD countries are displayed separately from those of the OECD countries and are not included in the OECD average. Scores are reported on a scale of 0 to 1,000. Scores are significantly different at the .05 level of statistical significance. Italics indicate education systems in non-national entities. UAE is the United Arab Emirates. For more information on PISA, see *supplemental note 5*.
 SOURCE: Fleischman, H.L., Hopstock, P.J., Pelczar, M.P., and Shelley, B.E. (2010). *Highlights From PISA 2009: Performance of U.S. 15-Year-Old Students in Reading, Mathematics, and Science Literacy in an International Context* (NCES 2011-004), table 3; data from the Organization for Economic Co-operation and Development (OECD), Program for International Student Assessment (PISA), 2009.

Figure 15-2. Average scores of 15-year-old students in the United States and OECD countries on combined reading literacy scale: 2000 and 2009

¹ The Organization for Economic Co-operation and Development (OECD) trend average used to report on trends in reading literacy is based on 27 OECD member countries with comparable data for 2000 and 2009. Data for Austria is excluded from OECD trend analyses because of a concern over a data collection issue in 2009; however, after consultation with Austrian officials, the National Center for Education Statistics kept the Austrian data in the U.S. trend reporting. For more information on the OECD average used to report on trends in reading literacy, see *supplemental note 5*.
 NOTE: The OECD average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale of 0 to 1,000. There were no statistically significant differences between the U.S. average score and the OECD average score in 2000 or in 2009 or in the U.S. average between 2000 and 2009. For more information on PISA, see *supplemental note 5*.
 SOURCE: Fleischman, H.L., Hopstock, P.J., Pelczar, M.P., and Shelley, B.E. (2010). *Highlights From PISA 2009: Performance of U.S. 15-Year-Old Students in Reading, Mathematics, and Science Literacy in an International Context* (NCES 2011-004), figure 4; data from the Organization for Economic Co-operation and Development (OECD), Program for International Student Assessment (PISA), 2000 and 2009.

International Mathematics and Science Literacy

In 2009, the average U.S. mathematics literacy score for 15-year-old students was below the average score of the 34 OECD member countries. On the science literacy scale, the average U.S. score was not measurably different from the OECD average.

The 2009 Program for International Student Assessment (PISA) reports on the performance of 15-year-olds in mathematics and science literacy in 65 countries and other education systems, including the 34 Organization for Economic Co-operation and Development (OECD) countries, 26 non-OECD countries, and 5 other education systems. The OECD countries are a group of the world's most advanced economies. Other education systems refer to non-national entities, such as Shanghai-China.

The average U.S. mathematics literacy score (487) in 2009 was lower than the average score of the 34 OECD countries (496). In comparison with students in all 64 other countries and education systems, students in the United States on average scored lower than students in 23 (17 OECD countries, 2 non-OECD countries, and 4 other education systems) and higher than students in 29 (5 OECD countries, 23 non-OECD countries, and 1 other education system).

No measurable difference was found between the average U.S. mathematics literacy scores in 2009 (487) and 2003 (483), the earliest time point to which PISA 2009 mathematics literacy scores can be compared (see table A-16-1). In both years, the U.S. average score was lower than the OECD average score.

In 2009, male students outscored their female peers in mathematics literacy in 35 countries and other education systems, and on average among the OECD countries (see table A-16-2). Female students outscored their male peers in 5 countries. On average, U.S. male students scored 20 scale score points above U.S. female students in 2009; this gender difference was greater than the 6-point difference observed in favor of U.S. male students over their female peers in 2003.

Technical Notes

Since PISA is principally an OECD study, the results for non-OECD countries and other education systems are displayed separately and are not included in the OECD average. The OECD average is the average of the national averages of the 34 OECD member countries, with each country weighted equally, and differs from the OECD average used for analysis of trends in student scores over

The average U.S. science literacy score (502) in 2009 was not measurably different from the average score of the 34 OECD countries (501). In comparison with students in all 64 other countries and education systems, students in the United States on average scored lower than students in 18 (12 OECD countries, 2 non-OECD countries, and 4 other education systems) and higher than students in 33 (9 OECD countries, 23 non-OECD countries, and 1 other education system).

The average U.S. science literacy score was higher in 2009 (502) than in 2006 (489), the only year of data to which PISA 2009 science literacy scores can be compared (see table A-16-3). The U.S. average was lower than the OECD average in 2006, but was not measurably different from the OECD average in 2009.

In 2009, female students outscored their male peers in science literacy in 21 countries and other education systems, while male students outscored their female peers in 11 countries (see table A-16-4). No measurable gender gap in science literacy scores was found among the OECD countries, on average, in 2009. U.S. male students scored 14 scale score points above U.S. female students on average in 2009, whereas no measurable gender difference was observed in 2006.



For more information: Tables A-16-1 through A-16-4
Glossary: Organization for Economic Co-operation and Development (OECD)

time. The OECD average used in the analysis of trends in mathematics literacy is based on the averages of the 29 OECD countries with comparable data for 2003 and 2009. For science literacy trends, all 34 OECD countries are used. Scores are reported on a scale from 0 to 1,000. For more information on PISA, see *supplemental note 5*.

Figure 16-1. Average scores of 15-year-old students on mathematics and science literacy scales, by country: 2009

Mathematics literacy scale					
OECD country and average score					
Korea, Republic of	546	New Zealand	519	Denmark	503
Finland	541	Belgium	515	Slovenia	501
Switzerland	534	Australia	514	Norway	498
Japan	529	Germany	513	France	497
Canada	527	Estonia	512	Slovak Republic	497
Netherlands	526	Iceland	507	OECD average	496
Austria	496	United Kingdom	492	Ireland	487
Poland	495	Hungary	490	Portugal	487
Sweden	494	Luxembourg	489	Spain	483
Czech Republic	493	United States	487	Italy	483
Greece	466	Turkey	445	Mexico	419
Israel	447	Chile	421		
Non-OECD country or other education system and average score					
<i>Shanghai-China</i>	600	Hong Kong-China	555	Liechtenstein	536
Singapore	562	<i>Chinese Taipei</i>	543	<i>Macao-China</i>	525
Latvia	482				
Lithuania	477	Uruguay	427	Colombia	381
Russian Federation	468	Thailand	419	Albania	377
Croatia	460	Trinidad and Tobago	414	Tunisia	371
<i>Dubai-UAE</i>	453	Kazakhstan	405	Indonesia	371
Serbia, Republic of	442	Montenegro, Republic of	403	Qatar	368
Azerbaijan	431	Argentina	388	Peru	365
Bulgaria	428	Jordan	387	Panama	360
Romania	427	Brazil	386	Kyrgyz Republic	331
Science literacy scale					
OECD country and average score					
Finland	554	Canada	529	Germany	520
Japan	539	Estonia	528	Switzerland	517
Korea, Republic of	538	Australia	527	United Kingdom	514
New Zealand	532	Netherlands	522	Slovenia	512
Poland	508	OECD average	501	Iceland	496
Ireland	508	Czech Republic	500	Sweden	495
Belgium	507	Norway	500	Austria	494
Hungary	503	Denmark	499	Portugal	493
United States	502	France	498		
Slovak Republic	490	Luxembourg	484	Turkey	454
Italy	489	Greece	470	Chile	447
Spain	488	Israel	455	Mexico	416
Non-OECD country or other education system and average score					
<i>Shanghai-China</i>	575	Singapore	542	Liechtenstein	520
<i>Hong Kong-China</i>	549	<i>Chinese Taipei</i>	520	<i>Macao-China</i>	511
Latvia	494				
Lithuania	491	Thailand	425	Kazakhstan	400
Croatia	486	Jordan	415	Albania	391
Russian Federation	478	Trinidad and Tobago	410	Indonesia	383
<i>Dubai-UAE</i>	466	Brazil	405	Qatar	379
Serbia, Republic of	443	Colombia	402	Panama	376
Bulgaria	439	Montenegro, Republic of	401	Azerbaijan	373
Romania	428	Argentina	401	Peru	369
Uruguay	427	Tunisia	401	Kyrgyz Republic	330

Average is higher than the U.S. average
 Average is not measurably different from the U.S. average
 Average is lower than the U.S. average

NOTE: The Organization for Economic Co-operation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Because the Program for International Student Assessment (PISA) is principally an OECD study, the results for non-OECD countries are displayed separately from those of the OECD countries and are not included in the OECD average. Countries are ordered on the basis of average scores, from highest to lowest within the OECD countries and non-OECD countries. Scores are significantly different at the .05 level of statistical significance. Italics indicate education systems in non-national entities. UAE is the United Arab Emirates. Scores are reported on a scale from 0 to 1,000. For more information on PISA, see *supplemental note 5*.

SOURCE: Fleischman, H. L., Hopstock, P. J., Pelczar, M. P., and Shelley, B. E. (2010). *Highlights From PISA 2009: Performance of U.S. 15-Year-Old Students in Reading, Mathematics, and Science Literacy in an International Context* (NCES 2011-004), table 8; data from the Organization for Economic Co-operation and Development (OECD), Program for International Student Assessment (PISA), 2009.

Annual Earnings of Young Adults

In 2009, young adults ages 25–34 with a bachelor's degree earned more than twice as much as young adults without a high school diploma or its equivalent, 50 percent more than young adult high school completers, and 25 percent more than young adults with an associate's degree.

In 2009, some 61 percent of young adults ages 25–34 who were in the labor force were employed full time throughout a full year. The percentage of young adults working full time throughout a full year was generally higher for those with higher levels of educational attainment. For example, 69 percent of young adults with a bachelor's degree or higher were full-time, full-year workers in 2009, compared with 55 percent of young adults with a high school diploma or its equivalent.

For young adults ages 25–34 who worked full time throughout a full year, higher educational attainment was associated with higher median earnings. This pattern of higher median earnings corresponding with higher levels of educational attainment was consistent for each year examined between 1995 and 2009 (see table A-17-1). For example, young adults with a bachelor's degree consistently had higher median earnings than those with less education. This relationship of higher median earnings corresponding with higher educational attainment also held across sex and race/ethnicity subgroups.

In 2009, the median of the earnings for young adults with a bachelor's degree was \$45,000, while the median was \$21,000 for those without a high school diploma or its equivalent, \$30,000 for those with a high school diploma or its equivalent, and \$36,000 for those with an associate's degree. In other words, young adults with a bachelor's degree earned more than twice as much as those without a high school diploma or its equivalent in 2009 (i.e., 114 percent more), 50 percent more than young adult high school completers, and 25 percent more than young adults with an associate's degree. In 2009, the median of the earnings of young adults with a master's degree or higher was \$60,000, some 33 percent more than the median for young adults with a bachelor's degree.

Between 1980 and 2009, the difference (in constant 2009 dollars) in median earnings increased between those with a bachelor's degree or higher and those who

had completed high school, as did the difference between those with a bachelor's degree or higher and those without a high school diploma or its equivalent. For example, in 1980, young adults with a bachelor's degree or higher earned \$18,200 more than those without a high school diploma or its equivalent. This difference increased to \$25,500 in 2005 and to \$29,000 in 2009. This increase in the differential in median earnings over this period was primarily due to the decrease in earnings for high school completers and young adults without a high school diploma or its equivalent. Between 1995 and 2009, there was no overall linear pattern in the difference in median earnings between those with a bachelor's degree and those with a master's degree or higher. For example, in 1995, young adults with a master's degree or higher earned \$12,700 more than their peers with a bachelor's degree; this difference in median earnings was \$10,100 in 2005 and \$15,000 in 2009.

Earnings differences were also observed by sex and race/ethnicity. In 2009, the median of the earnings for young adult males was higher than the median for young adult females at every education level (see figure 18-2). For example, in 2009, young adult males with a bachelor's degree earned \$51,000, while their female counterparts earned \$40,100. In the same year, the median of White young adults' earnings was higher than that of Black and Hispanic young adults' earnings at most education levels. Asian young adults with a bachelor's degree or with a master's degree or higher had higher median earnings than did their White, Black, and Hispanic counterparts in 2009. For example, in 2009, the median of earnings for young adults with at least a master's degree was \$70,000 for Asians, \$58,000 for Whites, \$55,000 for Blacks, and \$53,000 for Hispanics.



For more information: Table A-17-1

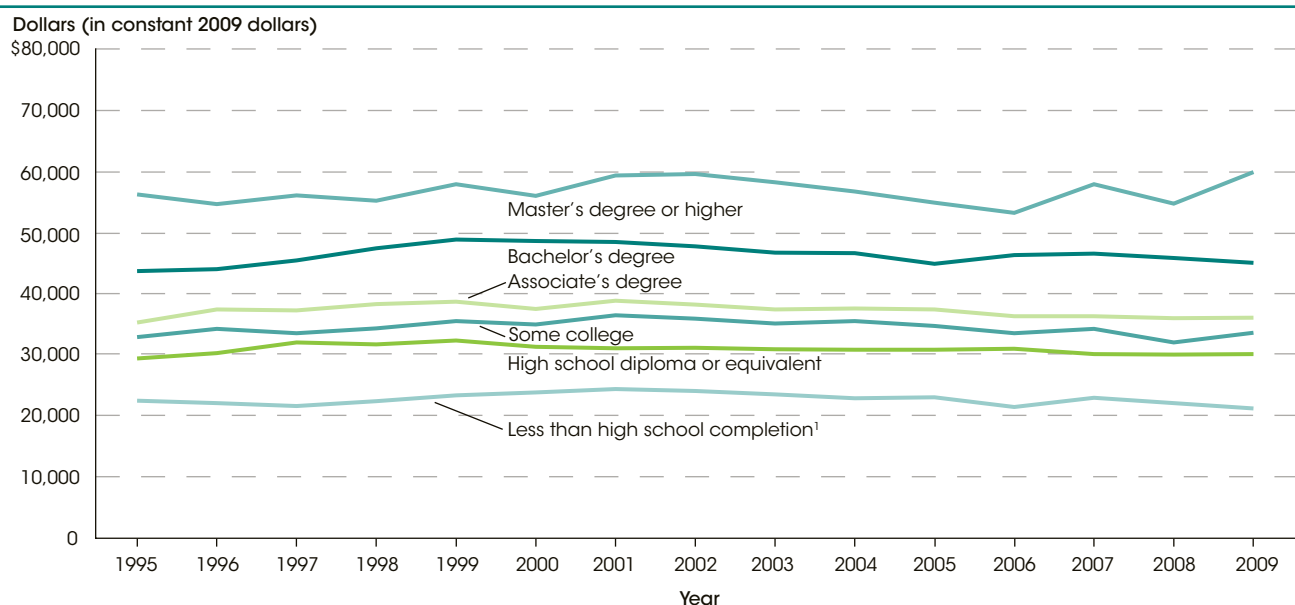
Glossary: Bachelor's degree, Constant dollars, Consumer Price Index (CPI), Educational attainment, High school completer, Master's degree

Technical Notes

High school completers are those who earned a high school diploma or equivalent (e.g., a General Educational Development [GED] certificate). Median earnings are presented in 2009 constant dollars by means of the Consumer Price Index (CPI) to eliminate inflationary factors and to allow for direct comparison across years. For more information on the CPI, see *supplemental note 10*. *Full-year worker* refers to those who were employed 50 or more weeks during the previous year; *full-time worker*

refers to those who were usually employed 35 or more hours per week. The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. In 1994, the survey instrument for the CPS was changed and weights were adjusted. For more information on changes to the CPS, see *supplemental note 2*. For more information on race/ethnicity, see *supplemental note 1*.

Figure 17-1. Median annual earnings of full-time, full-year wage and salary workers ages 25-34, by educational attainment: 1995-2009

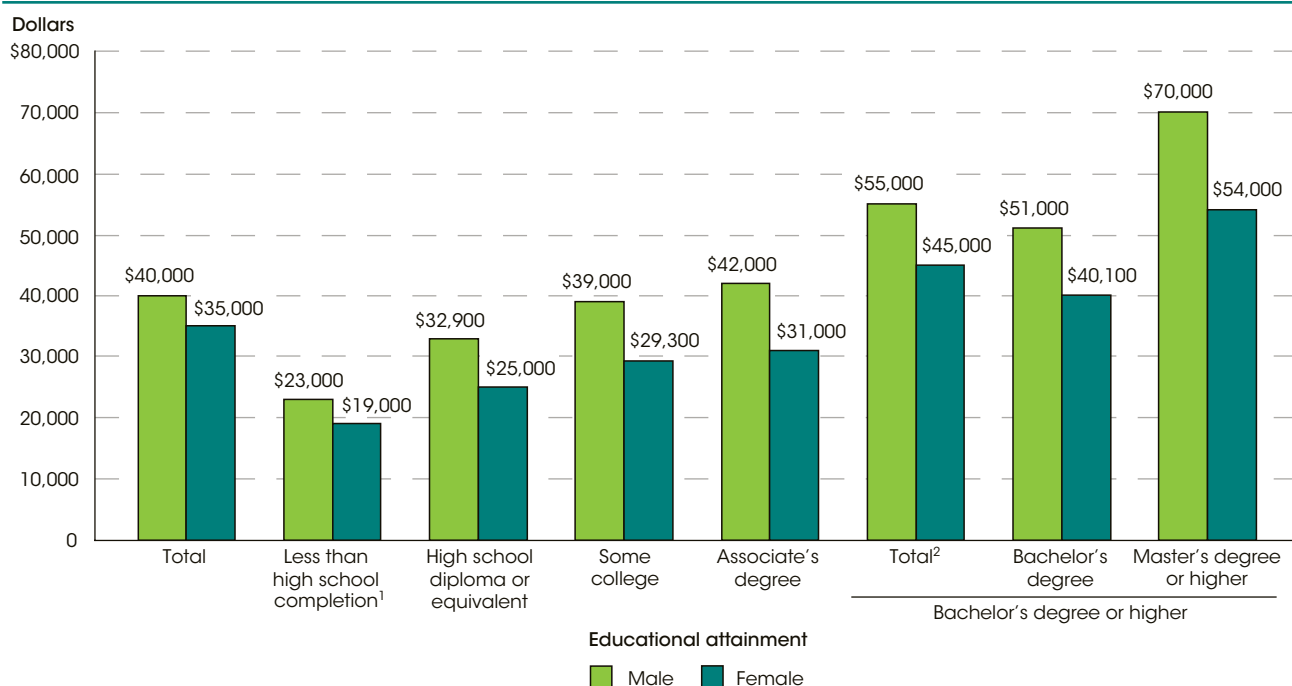


¹ Young adults in this category did not earn a high school diploma or receive alternative credentials, such as a General Educational Development (GED) certificate.

NOTE: Earnings are presented in 2009 constant dollars by means of the Consumer Price Index (CPI) to eliminate inflationary factors and to allow for direct comparison across years. For more information on the CPI, see *supplemental note 10*. Full-year worker refers to those who were employed 50 or more weeks during the previous year; full-time worker refers to those who were usually employed 35 or more hours per week. For more information on the Current Population Survey (CPS), see *supplemental note 2*.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, 1996-2010.

Figure 17-2. Median annual earnings of full-time, full-year wage and salary workers ages 25-34, by educational attainment and sex: 2009



¹ Young adults in this category did not earn a high school diploma or receive alternative credentials, such as a General Educational Development (GED) certificate.

² Total represents median annual earnings of young adults with a bachelor's degree or higher.

NOTE: Full-year worker refers to those who were employed 50 or more weeks during the previous year; full-time worker refers to those who were usually employed 35 or more hours per week. For more information on the Current Population Survey (CPS), see *supplemental note 2*. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, 2010.

Employment Outcomes of Young Adults

In 2010, young adults ages 25–34 with at least a bachelor's degree had a full-time employment rate that was over 30 percentage points higher than that of their peers who had not completed high school (74 vs. 41 percent).

In 2010, some 73 percent of young adults ages 25–34 were employed (61 percent full time and 12 percent part time), 9 percent were unemployed, and 18 percent were not in the labor force (see table A-18-1). In each year shown from 1990 to 2010, a greater percentage of young adults with at least a bachelor's degree were employed full time than were their peers with lower levels of education. In 2010, for example, 74 percent of those with a bachelor's degree or higher were employed full time (including 73 percent of bachelor's degree holders and 77 percent of those with a master's degree or higher), compared with 65 percent of those with an associate's degree, 56 percent of those with some college education, 55 percent of high school completers, and 41 percent of those who had not completed high school (i.e., those without a high school diploma or its equivalent). Additionally, a smaller percentage of young adults with a bachelor's degree or higher were unemployed than were their peers with lower levels of education. In 2010, for example, 4 percent of those with a bachelor's degree or higher were unemployed (including 4 percent of bachelor's degree holders and 3 percent of those with a master's degree or higher), compared with 7 percent of those with an associate's degree, 10 percent of those with some college education, 13 percent of high school completers, and 14 percent of those who had not completed high school.

The percentage of young adults who were unemployed in 2010 (9 percent) was higher than the percentages in 2000 (3 percent) and 2005 (5 percent). The full-time employment rate in 2010 (61 percent) was lower than the rates in these years as well (72 and 67 percent, respectively). In addition, the percentage of young adults who were employed full time was lower in 2010 than in 2000 at each level of educational attainment. For example, 55 percent of young adults who had not completed high school were employed full time in 2000, compared with 41 percent in 2010. Among young adults with at least a

bachelor's degree, the corresponding percentages were 81 percent and 74 percent. Comparing full-time employment rates in 2010 with those in 2005, rates were lower for young adults with less than a bachelor's degree but no measurable changes were found between these two years for young adults with at least a bachelor's degree.

Overall, in 2010, White young adults had the highest rate of full-time employment and American Indian/Alaska Native young adults had the lowest rate (see table A-18-2). Blacks had the highest overall unemployment rate among young adults and Asians had the lowest rate. In 2010, the range in the percentage of young adults who were not in the labor force went from 16 percent for Whites to 27 percent for American Indians/Alaska Natives.

Trends in employment, unemployment, and labor force participation for young adults varied by race/ethnicity and educational attainment in 2010. With the exception of master's degree or higher, at each level of educational attainment, a greater percentage of Black young adults was unemployed than were their peers of other races/ethnicities. Patterns for full-time employment among young adults varied more widely across racial/ethnic groups. For example, among those with at least a bachelor's degree, the rate of full-time employment was lower for Asians (63 percent) than for their peers in the other racial/ethnic groups (71 to 77 percent). In addition, the percentage of young adults with at least a bachelor's degree who were not in the labor force was higher for Asians (24 percent) than for their peers in the other racial/ethnic groups (10 to 14 percent).



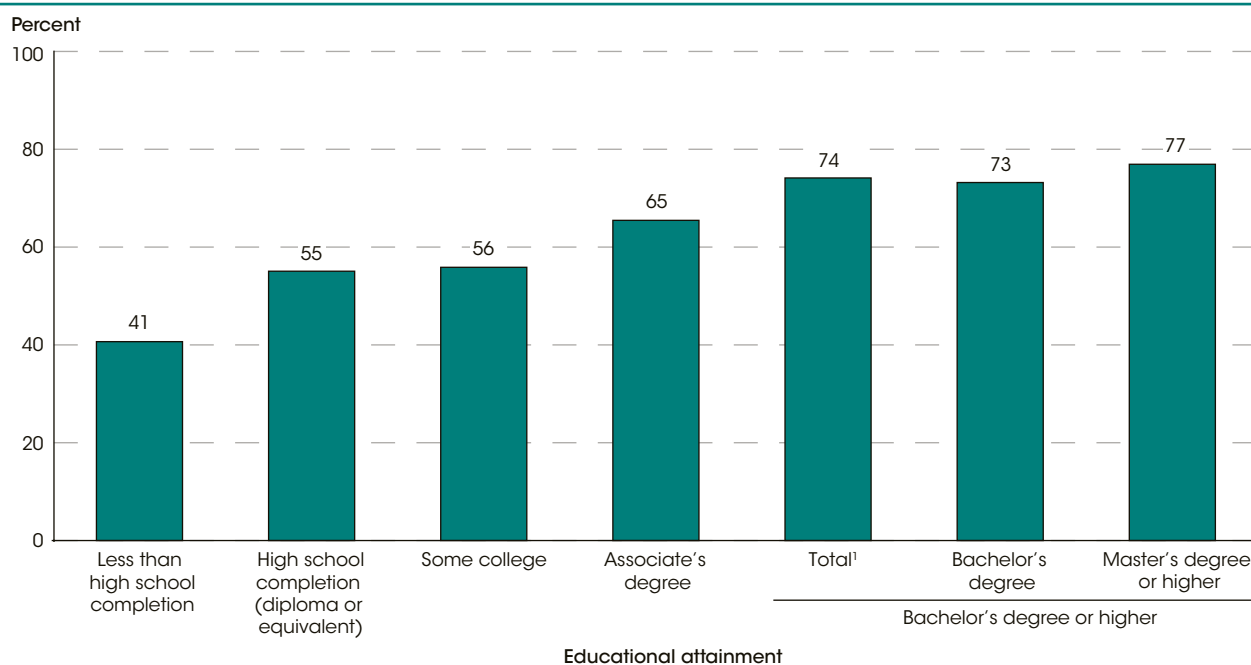
For more information: *Tables A-18-1 and A-18-2*

Glossary: *Associate's degree, Bachelor's degree, Educational attainment, High school diploma, Master's degree*

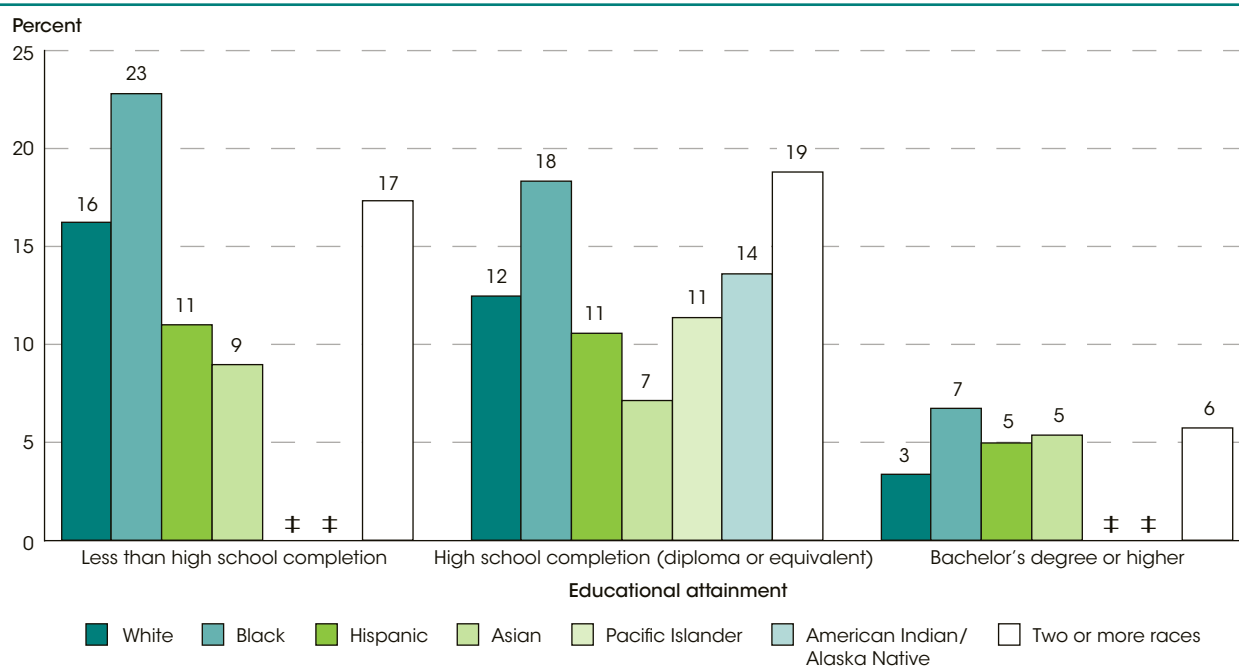
Technical Notes

Persons who were employed 35 or more hours during the previous week were classified as working full time; those who worked fewer hours were classified as working part time. *High school completers* refers to those who earned a high school diploma or equivalent (e.g., a General Educational Development [GED] certificate). Race

categories exclude persons of Hispanic ethnicity. For more information on race/ethnicity, see *supplemental note 1*. The Current Population Survey (CPS) questions used to obtain data on educational attainment were changed in 1992. For more information on the CPS, see *supplemental note 2*.

Figure 18-1. Percentage of adults ages 25-34 who were employed full time, by educational attainment: 2010

NOTE: Persons who were employed 35 or more hours during the previous week were classified as working full time. For more information on the Current Population Survey, see *supplemental note 2*.
 SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC), 2011.

Figure 18-2. Percentage of adults ages 25-34 who were unemployed, by race/ethnicity and selected levels of educational attainment: 2010

NOTE: For more information on race/ethnicity, see *supplemental note 1*. For more information on the Current Population Survey, see *supplemental note 2*.
 SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC), 2011.